

L2 ANSWER 78 OF 99 CA COPYRIGHT 2005 ACS on STN  
 AN 106:218652 CA  
 ED Entered STN: 26 Jun 1987  
 TI Manufacture of **cement** boards  
 IN Yamaguchi, Kyonori; Masuyama, Hisao; Sato, Yosuke  
 PA Nichias Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C04B028-04  
 ICA B32B013-06  
 ICI C04B028-04, C04B014-04, C04B016-02, C04B018-14, C04B024-26, C04B024-38  
 CC 58-1 (Cement, Concrete, and Related Building Materials)  
 FAN. CNT 1

|      | PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---------------|------|----------|-----------------|----------|
| PI   | JP 61256956   | A2   | 19861114 | JP 1985-97920   | 19850510 |
| PRAI | JP 1985-97920 |      | 19850510 |                 |          |

CLASS

| PATENT NO.  | CLASS | PATENT FAMILY CLASSIFICATION CODES                                     |
|-------------|-------|--|
| JP 61256956 | ICM   | C04B028-04   |
|             | ICA   | B32B013-06   |
|             | ICI   | C04B028-04, C04B014-04, C04B016-02, C04B018-14, C04B024-26, C04B024-38 |

AB Portland cement, amorphous SiO<sub>2</sub> powder (particle size  $\leq 1 \mu$ ), wollastonite, and pulp are mixed with a large amount of water to give a slurry, mixed with polyacrylamide and cationic starch coagulation agents, paper-made into thick sheets, and then cured at standard temperature to give **cement** boards. High-strength boards are prepared without using asbestos reinforcement. Thus, aqueous slurry (8% solid) of portland **cement** 62, SiO<sub>2</sub> fume 20, wollastonite 12, and pulp 6 weight% was mixed with 0.03 weight% polyacrylamide and 0.4 weight% **cationic starch**, paper-made into 6 mm thick sheets, and cut into 1450 + 1300 mm sheets, 6 sheets were laminated crosswise, compressed to 30 mm thick by 50 kg/cm<sup>2</sup> pressure application, cured 1 wk in a plastic bag, and further cured 1 wk out of the plastic bag. Boards having bending strength 210 kg/cm<sup>2</sup> was manufactured at 84% yield, compared to manufacture of those having bending strength 200 kg/cm<sup>2</sup> at 30% yield when free of polyacrylamide.

ST board **cement cationic starch** coagulant;  
 polyacrylamide coagulant **cement** board  
 IT Pulp, cellulose  
 (coagulants for **cement** boards containing)  
 IT **Cement**